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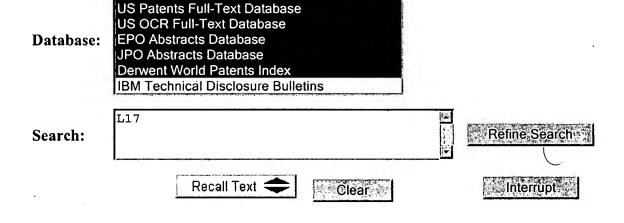
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	SdrG	46	L10	
	L1 and SdrG	0	<u>L9</u>	
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	L3 and SdrG	25	<u>L7</u>	
	L5 and SdrG	5	<u>L6</u>	
	hartford.in.	296	<u>L5</u>	
	nieidhin.in.	2	<u>L4</u>	
	hook.in.	1893	<u>L3</u>	
	mccrea.in.	361	<u>L2</u>	
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END OF SEARCH HISTORY

Refine Search

Search Results -

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<u>L5</u>	hartford.in.	296	<u>L5</u>
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Fulltext available through: Biosis Previews(R)
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(c) 2007 The Thomson Corporation. All rights reserved.
              Biosis No.: 200700215496
A panel of monoclonal antibodies recognizing the Staphylococcus epidermidis
                                          Page 4
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fibrinogen-binding MSCRAMM SdrG

Author: Hall Andrea E; Patel Pratiksha R; Domanski Paul J; Prater Bradley D; Gorovits Elena L; Syribeys Peter J; Vernachio John H; Patti Joseph M; Hutchins Jeff

Author Address: Inhibitex Inc, 9005 Westside Pkwy, Alpharetta, GA 30004 USA**USA

Author E-mail Address: jhutchins@inhibitex.com Journal: Hybridoma 26 (1): p 28-34 FEB 2007 2007

ISSN: 1554-0014

Document Type: Article Record Type: Abstract

Language: English
A panel of monoclonal antibodies recognizing the Staphylococcus epidermidis

fibrinogen-binding MSCRAMM SdrG

Abstract: ...stage contributing to the pathogenesis of this bacteria is the initial adherence to host tissue. SdrG is a cell-wall-anchored fibrinogen-binding adhesin of S. epidermidis that has been shown to be necessary for bacterial binding to fibrinogen-coated foreign bodies, such as catheters. Here we report the generation and characterization of a panel of monoclonal antibodies (MAbs) directed against this S. epidermidis virulence factor. Through the use of multiple in... ...that may prove to be beneficial in studies that address the precise biologic role of SdrG. DESCRIPTORS:

fibrinogen;monoclonal antibody... ...SdrG Chemicals & Biochemicals:

>>>W: KWIC option is not available in file(s): 399 7/K/2 (Item 2 from file: 5) Links

Fulltext available through: American Society for Microbiology custom link USPTO Full Text Retrieval Options Biosis Previews(R)

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Biosis No.: 200600289159 18943764

Human immunoglobulin G recognizing fibrinogen-binding surface proteins is protective against both Staphylococcus aureus and Staphylococcus epidermidis infections in vivo

Author: Vernachio John H (Reprint); Bayer Arnold S; Ames Brenda; Bryant Dawn; Prater Bradley D; Syribeys Peter J; Gorovits Elena L; Patti Joseph M Author Address: Inhibitex Inc, 9005 Westside Pkwy, Alpharetta, GA 30004 USA**USA

Author E-mail Address: jvernachio@inhibitex.com

Journal: Antimicrobial Agents and Chemotherapy 50 (2): p 511-518 FEB 2006 2006

ISSN: 0066-4804

Document Type: Article Record Type: Abstract Language: English

Human immunoglobulin G recognizing fibrinogen-binding surface proteins is protective against both Staphylococcus aureus and Staphylococcus epidermidis infections in vivo

Abstract: A human donor-selected immunoglobulin G for intravenous injection (IGIV) product with elevated titers against the staphylococcal fibrinogen-binding MSCRAMM proteins ClfA and SdrG (INH-A21) was tested in vitro and in vivo. INH-A21 contained a significantly increased ability to inhibit the fibrinogen-binding activity of recombinant forms of both ClfA and SdrG. Evaluation of the opsonizing potential of INH-A21 was evaluated using fluorescently labeled bacteria; this... **DESCRIPTORS:**

Chemicals & Biochemicals: ...immunoglobulin G... ...SdrG;fibrinogen-binding surface proteins

KWIC option is not available in file(s): 399 7/K/3 (Item 3 from file: 5) Links

Fulltext available through: Biosis Previews(R) USPTO Full Text Retrieval Options

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Biosis No.: 200500098483 18192570

A fibrinogen-binding protein of Staphylococcus lugdunensis

Author: Nilsson Martin; Bjerketorp Joakim; Guss Bengt; Frykberg Lars (Reprint) Author Address: Dept Microbiol, Swedish Univ Agr Sci, POB 7025, SE-75007, Uppsala, Sweden** Sweden

Author E-mail Address: lars.frykberg@mikrob.slu.se

Journal: FEMS Microbiology Letters 241 (1): p 87-93 December 1, 2004 2004

Medium: print ISSN: 0378-1097

Document Type: Article Record Type: Abstract Language: English

A fibrinogen-binding protein of Staphylococcus lugdunensis

Abstract: A gene called fbl, encoding a Staphylococcus lugdunensis fibrinogen -binding protein, was identified by phage display. The encoded protein, Fbl, is a member of the Sdr-family, a group of staphylococcal cell surface proteins containing a characteristic serine-aspartate repeat region. The fibrinogen-binding domain was mapped to 313 amino acids, and shows, 62% identity to the corresponding region in clumping factor (ClfA) from Staphylococcus aureus. Anti-serum against ClfA cross-reacted with Fbl, and blocked S. lugdunensis adherence to fibrinogen. Twelve clinical isolates of S. lugdunensis analysed by southern blocked and first all bed on fibrinogen. clinical isolates of S. lugdunensis analysed by Southern blot all had an fbl-like...

DESCRIPTORS:

Chemicals & Biochemicals: fibrinogen;fibrinogen-binding protein

>>>W: KWIC option is not available in file(s): 399 7/K/4 (Item 4 from file: 5) Links

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Biosis No.: 200400395602

beta2-integrins mediate a novel form of chemoresistance in cycloheximide-induced U937 apoptosis

Author: Wu R-C; Wang Z (Reprint); Liu M-J; Chen D-F; Yue X-S

Author Address: Dept Biol Sci and Biotechnol, Tsing Hua Univ, Beijing, 100084,

Author E-mail Address: zwang@tsinghua.edu.cn

61 (16): p 2071-2082 August Journal: CMLS Cellular and Molecular Life Sciences

2004 2004

Medium: print ISSN: 1420-682X

Document Type: Article

Record Type: Abstract Language: English

Abstract: ...leukaemic cell line U937, a novel form of chemoresistance, which we termed sudden drug resistance (SDR), was identified using Hoechst33258 staining, western blott and DNA Ladder. CHXhigh (10-100 mug/mlinhibited by short-term preincubation with CHXlow (2.5 mug/ml). Unlike typical multidrug resistance, SDR is not caused by reduced drug accumulation or altered protein expression, and may be associated.....adhesion has been suggested to influence cell survival and prevent apoptosis. EDTA, or anti-CD18 monoclonal antibody, but not EGTA, acetylsalicylic acid or RGDS tetrapeptide, abrogated this homotypic aggregation and greatly increased CHX-induced apoptosis in a time-dependent manner, while fibrinogen and soluble intercellular adhesion molecule-1 exerted opposite effects. These results establish that beta2-integrin engagement is a key mediator of SDR, although it may

sdrgantibody.txt be non-exclusive. This finding supplements the classical basis of chemoresistance and.. DESCRIPTORS: Chemicals & Biochemicals: ...anti-CD18 monoclonal antibody...
Miscellaneous Terms: Concept Codes: sudden drug resistance {SDR} >>>W: KWIC option is not available in file(s): 399 7/K/5 (Item 5 from file: 5) Links Fulltext available through: USPTO Full Text Re-USPTO Full Text Retrieval Options Biosis Previews(R) (c) 2007 The Thomson Corporation. All rights reserved. Biosis No.: 200300519934 Methicillin-resistant Staphylococcus aureus isolates carrying pls invade host cells less efficiently than pls-negative MRSA isolates. Author: Sinha B (Reprint); Juuti K; Werbick C (Reprint); Kuusela P; Peters G (Reprint) Author Address: Institute of Medical Microbiology, University Hospital of Muenster, Muenster, Germany**Germany Journal: Abstracts of the General Meeting of the American Society for Microbiology 103 p B-207 2003 2003 Medium: cd-rom Conference/Meeting: 103rd American Society for Microbiology General Meeting Washington, DC, USA May 18-22, 2003; 20030518 Sponsor: American Society for Microbiology ISSN: 1060-2011 _(ISSN print) Document Type: Meeting; Meeting Abstract Record Type: Abstract Language: English Abstract: ...MSSA isolates. Pls (plasmin-sensitive) is a cell wall-anchored surface protein, belonging to the Sdr family of adhesins. Since adherence of pls-positive MRSA isolates to immobilized IgG, fibrinogen and Fn is reduced, we tested, whether this is also true for cellular invasiveness. Methods... **DESCRIPTORS:** Chemicals & Biochemicals: IgG {immunoglobulin G... KWIC option is not available in file(s): 399 7/K/6 (Item 6 from file: 5) Links Biosis Previews(R) (c) 2007 The Thomson Corporation. All rights reserved. Biosis No.: 200300277832 MSCRAMM(R) protein mAb protects against S. epidermidis central venous catheter induced infection.

Author: Vernachio J (Reprint); Bryant D (Reprint); Hall A (Reprint); Patel P (Reprint); Domanski P (Reprint); Syribeys P (Reprint); Gorovits E (Reprint); Wang J (Reprint); Robbins J (Reprint); Hutchins J (Reprint); Patti J (Reprint)
Author Address: Inhibitex, Inc., Alpharetta, GA, USA**USA
Journal: Abstracts of the Interscience Conference on Antimicrobial Agents and Chemotherapy 42 p 32 2002 2002
Medium: print
Conference/Meeting: American Society for Microbiology (ASM) Annual Meeting on Infectious Disaease San Diego, CA, USA September 27-30, 2002; 20020927
Sponsor: American Society for Microbiology
Document Type: Meeting; Meeting Abstract
Record Type: Abstract
Language: English

Abstract: ...both a reduction in the incidence and severity of disease. We have demonstrated that a monoclonal antibody (mAb) against the MSCRAMM(R) protein, SdrG, Page 7

inhibits the binding to human fibrinogen in vitro and also provides significant protection against methicillin resistant S. epidermidis (MRSE) challenge in... ...infection model. Methods: Clinical efficacy was evaluated in a rat model of CVC-associated infection. SdrG mAb 59-59 (n=10) and a control mAb (n=13) were administered IV. 24... ...were infected (13/13). Conclusions: These data clearly demonstrate that a single infusion with a SdrG mAb can significantly prevent catheter associated MRSE bacteremia and subsequent hematogenous dissemination to target organs. **DESCRIPTORS:**

Chemicals & Biochemicals: monoclonal antibody ...monoclonal antibodies... ... MSCRAMM protein

>>W: KWIC option is not available in file(s): 399 7/K/7 (Item 7 from file: 5) Links

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Biosis No.: 200200565979

Prevention of experimental Staphylococcus epidermidis (SE) endocarditis (IE) by passive immunotherapy with INH-A00021, a human IgG directed against staphylococcal fibrinogen-binding proteins

Author: Kupferwasser L I (Reprint); Prater B; Wang J; Ruckstuhl M J; Lee K; Gast D;

Adams D: Patti J M: Bayer A S (Reprint)

Author Address: Harbor-UCLA Res. and Ed. Inst., Torrance, CA, USA**USA

Journal: Abstracts of the Interscience Conference on Antimicrobial Agents and

41 p 278 2001 2001 Chemotherapy

Medium: print

Conference/Meeting: 41st Annual Meeting of the Interscience Conference on September 22-25, Antimicrobial Agents and Chemotherapy Chicago, Illinois, USA 2001; 20010922

Document Type: Article; Meeting Record Type: Abstract

Language: English

...ŠE) endocarditis (IE) by passive immunotherapy with INH-A00021, a human IgG directed against staphylococcal fibrinogen-binding proteins

Abstract: Background: SE is a major cause of endovascular infections, utilizing adhesins such as the fibrinogen-binding adhesin, SdrG, to bind to sites of endovascular damage. Purpose: INH-A00021 is a donor-selected, plasma-derived hyperimmune globulin containing elevated levels of IgG against the staphylococcal fibrinogen-binding proteins, SdrG, and ClfA. This study evaluated the efficiency of INH-A00021 in attenuating experimental SE IE... ...p=0.0006). Also, the extent of bacteremia was significantly lower in animals receiving anti-SdrG, when compared to controls (p<0.01). Results of quantitative tissue cultures (mean log10CFU/g... DESCRIPTORS:

Chemicals & Biochemicals: ...IgG {immunoglobulin G.....SdrG--.... ...fibrinogen-binding adhesion.....staphylococcal fibrinogen-binding proteins

>>>W: KWIC option is not available in file(s): 399 7/K/8 (Item 8 from file: 5) Links

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15411492 Biosis No.: 200000129805

A bone sialoprotein-binding protein from Staphylococcus aureus: A member of the staphylococcal Sdr family

Author: Tung Hui-shan; Guss Bengt; Hellman Ulf; Persson Lena; Rubin Kristofer; Ryden Cecilia (Reprint)

Author Address: Department of Medical Biochemistry and Microbiology, Uppsala University, BMC, SE-751 23, Uppsala, Sweden**Sweden

Journal: Biochemical Journal 345 (3): p 611-619 Feb. 1, 2000 2000 Medium: print ISSN: 0264-6021

Document Type: Article Record Type: Abstract Language: English

A bone sialoprotein-binding protein from Staphylococcus aureus: A member of the staphylococcal Sdr family

Abstract: ...acids, called BSP-binding protein (Bbp), which displays similarity to recently described proteins of the Sdr family from S. aureus. SdrC, SdrD and SdrE encode putative cell-surface proteins with no described ligand specificity. Bbp also shows similarity to a fibrinogen -binding protein from S. epidermidis called Fbe. A serine-aspartic acid repeat sequence was found close to the cell-wall-anchoring Leu....protein bound radiolabelled native BSP, and inhibited the binding of radiolabelled BSP to staphylococcal cells. Serum from patients suffering from bone and joint infection contained antibodies that reacted with the fusion...
DESCRIPTORS:

Chemicals & Biochemicals: Sdr;

>>>W: KWIC option is not available in file(s): 399
7/K/9 (Item 1 from file: 34) Links
 Fulltext available through: American Society for Microbiology custom link
USPTO Full Text Retrieval Options
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09577298 Genuine Article#: 423CT No. References: 51
Expression of pls, a gene closely associated with the mecA gene of
methicillin-resistant Staphylococcus aureus, prevents bacterial adhesion in vitro

Author: Savolainen K (REPRINT); Paulin L; Westerlund-Wikstrom B; Foster TJ; Korhonen TK; Kuusela P Corporate Source: Univ Helsinki, Div Gen Microbiol, Dept Biosci, POB 56/FIN-00014 Helsinki//Finland/ (REPRINT); Univ Helsinki, Div Gen Microbiol, Dept Biosci, FIN-00014 Helsinki//Finland/; Univ Helsinki, Inst Biotechnol, FIN-00014 Helsinki//Finland/; Univ Helsinki, Haartman Inst, Dept Bacteriol & Immunol, FIN-00014 Helsinki//Finland/; Univ Helsinki, Cent Hosp, HUCH Lab Diagnost, Div Clin Microbiol, Helsinki//Finland/; Univ Dublin Trinity Coll, Moyne Inst Prevent Med, Dept Microbiol, Dublin 2//Ireland/ Journal: INFECTION AND IMMUNITY, 2001, V 69, N5 (MAY), P 3013-3020 ISSN: 0019-9567 Publication date: 20010500 Publisher: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE) Abstract: ...distinct repeat regions, one of which was a serine-aspartate repeat characteristic of the Clf-Sdr family of surface proteins in staphylococci, The lengths of the repeat regions varied in different.....digested DNA. A pls mutant constructed by allele replacement adhered well to immobilized fibronectin and immunoglobulin e, in contrast to the parental strain, suggesting that Pls could have a role in... Identifiers-- ...FIBRINOGEN-BINDING PROTEIN; NUCLEOTIDE-SEQUENCE; CLUMPING FACTOR;

INSERTIONAL INACTIVATION; ESCHERICHIA-COLI; REPEAT REGION; FIBRONECTIN; CLONING; DNA

>>>W: KWIC option is not available in file(s): 399

7/K/10 (Item 2 from file: 34) Links

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02147492 Genuine Article#: KE378 No. References: 43

INHIBITION OF PLATELET-ADHESION TO FIBRIN(OGEN) IN FLOWING WHOLE-BLOOD BY

ARG-GLY-ASP AND FIBRINOGEN GAMMA-CHAIN CARBOXY TERMINAL PEPTIDES

Author: HANTGAN RR; ENDENBURG SC; CAVERO I; MARGUERIE G; UZAN A; SIXMA JJ; DEGROOT Page 9

Corporate Source: WAKE FOREST UNIV, BOWMAN GRAY SCH MED, DEPT BIOCHEM, MED CTR BLVD/WINSTON SALEM//NC/27157; UNIV UTRECHT, DEPT HEMATOL/UTRECHT//NETHERLANDS/; RHONE POULENC RORER RD/VITRY//FRANCE/; INSERM, U127, HEMATOL LAB/GRENOBLE//FRANCE/ Journal: THROMBOSIS AND HAEMOSTASIS , 1992 , V 68 , N6 (DEC 7) , P 694-700 ISSN: 0340-6245 (Abstract Available) Language: ENGLISH Document Type: ARTICLE ... OF PLATELET-ADHESION TO FIBRIN(OGEN) IN FLOWING WHOLE-BLOOD BY ARG-GLY-ASP AND FIBRINOGEN GAMMA-CHAIN CARBOXY TERMINAL PEPTIDES Abstract: We have employed synthetic peptides with sequences corresponding to the integrin receptor-recognition regions of fibrinogen as inhibitors of platelet aggregation and adhesion to fibrinogen and fibrin-coated surfaces in flowing whole blood, using a rectangular perfusion chamber at wall.....1,300 s-1. D-RGDW caused substantial inhibition of platelet aggregation and adhesion to fibrinogen and fibrin at both shear rates, although it was least effective at blocking platelet adhesion... ...300 s-1. RGDS was a weaker inhibitor, and produced a biphasic dose-response curve; SDRG was inactive. HHLGGAKQAGDV partially inhibited platelet aggregation and adhesion to fibrin(ogen) at both shear ... Identifiers-- ...GLYCOPROTEIN-IIB-IIIA; VONWILLEBRAND-FACTOR; MONOCLONAL -ANTIBODIES; ARTIFICIAL SURFACES; BINDING; RECEPTOR; SUBENDOTHELIUM; COMPLEX; CELLS; **FIBRONECTIN** Research Fronts: 91-2339 004 (PLATELET GLYCOPROTEIN-IIB-IIIA COMPLEX; FIBRINOGEN RECEPTOR ANTAGONIST; ANTIPLATELET ARG-GLY-ASP-CONTAINING PEPTIDE; SNAKE-VENOM PROTEIN ECHISTATIN) 91-5876 001... >>>W: KWIC option is not available in file(s): 399 7/K/11 (Item 1 from file: 50) Links Fulltext available through: USPTO Full Text Retrieval Options CAB Abstracts (c) 2007 CAB International. All rights reserved. CAB Accession Number: 20013167686 0008126189 Fibrinogen - and von Willebrand factor-binding proteins in staphylococci. Nilsson, M. Department of Microbiology, Swedish University of Agricultural Sciences, Box 7025, S-750 07 Uppsala, Sweden. Acta Universitatis Agriculturae Sueciae - Agraria (265): p.115 Publication Year: 2001 ISSN: 1401-6249 Publisher: Sveriges Lantbruksuniversitet (Swedish University of Agricultural Uppsäla , Sweden Sciences) ISBN: 91-576-5791-2 Record Type: Abstract Language: English Document Type: Thesis Fibrinogen - and von Willebrand factor-binding proteins in staphylococci. ... genes, isolated from coagulase-negative staphylococci (CoNS) associated with human infections, and their corresponding proteins. Fbe and Fbl are the main fibrinogen (Fg)-binding proteins of Staphylococcus epidermidis and S. lugdunensis, respectively. Both proteins are members of the Sdr (SD-repeat containing protein) family, a subgroup of cell surface proteins in staphylococci with a....less perfect, tandemly repeated serine and aspartate residues. Sequence comparisons in the binding regions between Fbe and Fbl revealed low mutual similarity. However, Fbl is relatively conserved (63% identity) in the binding region compared to clumping factor A (ClfA), the prototype Sdr protein from S. aureus. The third gene, vWbl, encodes a putative von Willebrand factor (vWf... ... an overall organization, that is characteristic for cell surface proteins in staphylococci. The importance of Fbe, Fbl and vWbl for their respective organisms during the infection process is not known, but to extracellular matrix or plasma-coated biomaterials. Separate recombinant constructs, comprising the binding regions of Fbe and Fbl or separate antibodies directed against the binding regions of the proteins, were able..... the adherence of S. epidermidis and S. lugdunensis, respectively, to immobilized Page 10

Fg. The presence of fbe, fbl and vwbl genes is very common in clinical isolates of the respective species. In... ... these experiments, vwbp immobilized on a Sepharose-column was used to purify vwf from human serum. The gene vwb was present in all tested strains of S. aureus .

Descriptors: ...fibrinogen;

>>>W: KWIC option is not available in file(s): 399 7/K/12 (Item 1 from file: 71) Links

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2004224218 02747070

betaSUB2-integrins mediate a novel form of chemoresistance in cycloheximide-induced U937 apoptosis

Wu R.-C.; Wang Z.; Liu M.-J.; Chen D.-F.; Yue X.-S.

Address: Z. wang, Dept. of Biol. Sci. and Biotech., Tsinghua University, Beijing,

Email: zwang@tsinghua.edu.cn Journal: Cellular and Molecular Life Sciences, 61/16 (2071-2082), 2004,

Switzerland CODEN: CMLSF ISSN: 1420-682X

Document Type: Article

Languages: English Summary Languages: English

No. of References: 48

DESCRIPTORS:

Apoptosis; Cycloheximide; U937 cell; betaSUB2-integrin; Drug resistance; PI-3K

CLASSIFICATION CODE AND DESCRIPTION: Modlecular Sequence Databank Number: 87.2.1.5 - CANCER RESEARCH / TUMOUR BIOLOGY / Cellular Biology and Biochemistry / Immortalisation, senescence and apoptosis 87.4.1.15 - CANCER RESEARCH / TREATMENT / Chemotherapy / Resistance 87.4.11 - CANCER RESEARCH / TREATMENT / Treatment Monitoring and Evaluation

...leukaemic cell line U937, a novel form of chemoresistance, which we termed sudden drug resistance (SDR), was identified using Hoechst33258 staining, Western blott and DNA Ladder. CHXSUPhigh (10-100 mug/ml)....inhibited by short-term preincubation with CHXSUPhigh (2.5 mug/ml). Unlike typical multidrug resistance, SDR is not caused by a computation on altertain avanages and may be accepted. by reduced drug accumulation or altered protein expression, and may be associated... ...has been suggested to influence cell survival and prevent apoptosis. EDTA, or anti-CD 18 monoclonal antibody, but not EGTA, acetylsalicylic acid or RGDS tetrapeptide, abrogated this homotypic aggregation and greatly increased CHX-induced apoptosis in a time-dependent manner, while fibrinogen and soluble intercellular adhesion molecule-1 exerted opposite effects. These results establish that betaSUB2-integrin engagement is a key mediator of SDR, although it may be non-exclusive. This finding supplements the classical basis of chemoresistance and...

KWIC option is not available in file(s): 399 7/K/13 (Item 1 from file: 155) Links USPTO Full Text Retrieval Options Fulltext available through: MEDLINE(R) (c) format only 2007 Dialog. All rights reserved. 15223135 PMID: 15583173 15223135 Protein FOG--a streptococcal inhibitor of neutrophil function.

Johansson Helena M; Morgelin Matthias; Frick Inga-Maria Department of Cell and Molecular Biology, Section for Clinical and Experimental Page 11

```
sdrgantibody.txt
Infectious Medicine, BMC, B14, Lund University, S-221 84 Lund, Sweden. Microbiology (Reading, England) (England) Dec 2004, 150 (Pt 12) ISSN: 1350-0872--Print Journal Code: 9430468
                                                                                           150 (Pt 12) p4211-21,
Publishing Model Print
Document Type: Journal Article; Research Support, Non-U.S. Gov't
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed
...of group G streptococci (GGS) form aggregates when grown in vitro. Aggregating strains interact with fibrinogen, and this study reports the isolation of a novel self-associating and fibrinogen-binding protein of GGS, denoted protein FOG. Sequencing of the fog gene revealed structural similarity.....of GGS express protein G, a protein known to interact with the constant region of immunoglobulin G and albumin. Surprisingly, a clinical isolate expressing protein G, but lacking protein FOG, was.....negative strain from being killed. The antibactericidal property of protein FOG is dependent on its fibrinogen-binding activity. Thus, in
property of protein FOG is dependent on its fibrinogen-binding activity. Thus, in
plasma, FOG precipitates fibrinogen, and when added to whole blood, protein FOG
triggers the formation of visible aggregates comprising fibrinogen and neutrophils
that are disabled in their killing of the bacteria. Moreover, the results
emphasize...
Descriptors: *Bacterial Proteins--metabolism--ME; *Blood--microbiology--MI; *Carrier
Proteins--metabolism--ME; *Fibrinogen--metabolism--ME; *Neutrophils
--immunology--IM; *Streptococcus--growth and development--GD
Chemical Name: Bacterial Proteins; Carrier Proteins; Fbe protein, bacteria;
Fibrinogen
>>>W: KWIC option is not available in file(s): 399
  7/K/14 (Item 1 from file: 393) Links
Beilstein Database - Abstracts
(c) 2007 Beilstein GmbH. All rights reserved. Beilstein Abstract Id: 6577659
Title: Human Immunoglobulin G Recognizing Fibrinogen-Binding Surface Proteins Is
Protective against both Staphylococcus aureus and Staphylococcus epidermidis .
Infections In Vivo
Document Type: Journal Record Type: Abstract Author: Vernachio, John H.; Bayer, Arnold S.; Ames, Brenda; Bryant, Dawn; Prater, Bradley D.; Syribeys, Peter J.; Gorovits, Elena L.; Patti, Joseph M. Chemother. (2006) Series: 50-2, 511 - 518 CODEN:
AMACCQ Language: English
Abstract Language: English
Title: Human Immunoglobulin G Recognizing Fibrinogen-Binding Surface Proteins Is
Protective against both Staphylococcus aureus and Staphylococcus epidermidis
Infections In Vivo
Abstract: A human donor-selected immunoglobulin G for intravenous injection (IGIV)
product with elevated titers against the staphylococcal fibrinogen-binding MSCRAMM
proteins ClfA and SdrG (INH-A21) was tested in vitro and in vivo. INH-A21 contained a significantly increased ability to inhibit the fibrinogen-binding activity of recombinant forms of both ClfA and SdrG. Evaluation of the opsonizing potential of INH-A21 was evaluated using fluorescently labeled bacteria; this...
           KWIC option is not available in file(s): 399
  7/K/15 (Item 2 from file: 393)
 Beilstein Database - Abstracts
 (c) 2007 Beilstein GmbH. All rights reserved.
 Beilstein Abstract Id: 6471865
Title: beta 2 -integrins mediate a novel form of chemoresistance in cycloheximide-induced U937 apoptosis
Document Type: Journal
                                             Record Type: Abstract
Author: Wu, R.-C.; Wang, Z.; Liu, M.-J.; Chen, D.-F.; Yue, X.-S. Citation: Cell. Mol. Life Sci (2004) Series: 61-16, 2071 - 2082 CODEN: CMLSFI
 Language: English
```

Keywords: apoptosis; cycloheximide; U937 cell; Beta 2 -integrin; drug resistance;

Abstract Language: English

PI-3K

Abstract: ... leukaemic cell line U937, a novel form of chemoresistance, which we termed sudden drug resistance (SDR), was identified using Hoechst33258 staining, western blott and DNA Ladder. CHX high (10-100 mu... short-term preincubation with CHX low (2.5 mu g/ml). Unlike typical multidrug resistance, SDR is not caused by reduced drug accumulation or altered protein expression, and may be associated... adhesion has been suggested to influence cell survival and prevent apoptosis. EDTA, or anti-CD18 monoclonal antibody, but not EGTA, acetylsalicylic acid or RGDS tetrapeptide, abrogated this homotypic aggregation and greatly increased CHX-induced apoptosis in a time-dependent manner, while fibrinogen and soluble intercellular adhesion molecule-1 exerted opposite effects. These results establish that beta 2 -integrin engagement is a key mediator of SDR, although it may be non-exclusive. This finding supplements the classical basis of chemoresistance and... >>>W: KWIC option is not available in file(s): 399 7/K/16 (Item 1 from file: 399) Links CA SEARCH(R) (c) 2007 American Chemical Society. All rights reserved. CA: 144(19)348882p PATENT Immunogenic composition comprising a mixture of staphylococcal antigens and uses as vaccines Inventor (Author): Castado, Cindy; Lecrenier, Nicolas Pierre Fernand; Neyt, Cecile Anne; Poolman, Jan Location: Belg. Assignee: GlaxoSmithKline Biologicals S.A. Patent: PCT International; WO 200632472 A2 Date: 20060330 Application: WO 2005EP10184 (20050920) *GB 200421082 (20040922) *GB 200421078 (20040922) *GB 200421081 (20040922) *GB 200421079 (20040922) *GB 20053143 (20050215) Pages: 132 pp. CODEN: PIXXD2 Language: English Patent Classifications: A61K-000/A Class: Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KM; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; LY; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SM; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM Designated Regional: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IS; IT; LT; LU; LV; MC; NL; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG; BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM >>>w: KWIC option is not available in file(s): 399 7/K/17 (Item 2 from file: 399) Links CA SEARCH(R) (c) 2007 American Chemical Society. All rights reserved. CA: 141(21)348821f PATENT Staphylococcus epidermidis-derived hyperimmune serum reactive antigens and encoding nucleic acids for diagnosis and treatment of bacterial infection and for antagonist screening Inventor (Author): Meinke, Andreas; Min, Bui Duc; Nagy, Eszter Location: Austria_ Assignee: Intercell AG Patent: PCT International; WO 200487746 A2 Date: 20041014 Application: WO 2004EP3398 (20040331) *EP 2003450078 (20030331) Page 13

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Pages: 196 pp.
CODEN: PIXXD2
Language: English
Patent Classifications:
   Class:
                C07K-014/00A
Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY; BZ; CA;
CH; ČN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR;
HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG;
MK; MN; MW; MX; NA; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA; ZM; ZW Designated Regional: BW; GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN;
GQ; GW; ML; MR; NE; SN; TD; TG
>>>W: KWIC option is not available in file(s): 399
 7/K/18 (Item 3 from file: 399)
CA SEARCH(R)
(c) 2007 American Chemical Society. All rights reserved.
                         CA: 139(17)259972x
                                                                 PATENT
Monoclonal and polyclonal antibodies recognizing coagulase-negative staphylococcal
proteins
Inventor (Author): Patti, Joseph M.; Hutchins, Jeff T.; Hall, Andrea; Domanski,
Paul; Patel, Pratisksha; Hook, Magnus; Robbins, Jeff; Vernachio, John; Bowden, Maria
Location: USA
Assignee: Inhibitex, Inc.; The Texas A & M University System Patent: PCT International; WO 200376470 A1 Date: 20030918 Application: WO 2003US6415 (20030305) *US PV361324 (20020305)
Pages: 72 pp.
CODEN: PIXXD2
Language: English
Patent Classifications:
                C07K-016/00A; C07K-001/00B; C07K-002/00B; C07H-021/04B; A61K-039/395B;
A61K-039/40B; A61K-039/00B; A61K-039/09B; A61K-039/085B
Designated Countries: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH;
CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MX; MZ; NO; NZ; OM; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; TJ; TM; TN; TR; TZ; UA; UG; UZ; VC; VN; YU; ZA; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM
Designated Regional: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG
>>>W: KWIC option is not available in file(s): 399
  7/K/19 (Item 1 from file: 357)
                                               Links
                                                USPTO Full Text Retrieval Options
     Fulltext available through:
Derwent Biotech Res.
 (c) 2007 The Thomson Corp. All rights reserved.
0420861 DBA Accession No.: 2007-06799
A panel of monoclonal antibodies recognizing the Staphylococcus epidermidis
fibrinogen-binding MSCRAMM SdrG hybridoma cell culture for recombinant monoclonal
antibody production
Author: HALL AE; PATEL PR; DOMANSKI PJ; PRATER BD; GOROVITS EL; SYRIBEYS PJ; VERNACHIO JH; PATTI JM; HUTCHINS JT Corporate Affiliate: Inhibitex Inc
 Corporate Source: Hutchins JT, Inhibitex Inc, 9005 Westside Pkwy, Alpharetta, GA
 30004 USA
                                                         2007
 Journal: HYBRIDOMA ( 26, 1, 28-34 )
                                                         Page 14
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sdrgantibody.txt ISSN: 1554-0014 Language: English
A panel of monoclonal antibodies recognizing the Staphylococcus epidermidis fibrinogen-binding MSCRAMM SdrG hybridoma cell culture for recombinant monoclonal antibody production Abstract: ...stage contributing to the pathogenesis of this bacteria is the initial adherence to host tissue. SdrG is a cell-wall-anchored fibringen-binding adhesin of S. epidermidis that has been shown to be necessary for bacterial binding to fibrinogen-coated foreign bodies, such as catheters. Here we report the generation and characterization of a panel of monoclonal antibodies (MAbs) directed against this S. epidermidis virulence factor. Through the use of multiple in... ...that may prove to be beneficial in studies that address the precise biologic role of SdrG. (7 Descriptors: Staphylococcus epidermidis fibrinogen-binding MSCRAMM SdrG -specific recombinant monoclonal antibody prep., purification, characterization, plasmid-mediated gene transfer, expression in Lactococcus lactis, hybridoma, mouse immunization... >>>W: KWIC option is not available in file(s): 399 7/K/20 (Item 2 from file: 357) Links USPTO Full Text Retrieval Options Fulltext available through: Derwent Biotech Res. (c) 2007 The Thomson Corp. All rights reserved. 0358809 DBA Accession No.: 2005-04513 A fibrinogen-binding protein of Staphylococcus lugdunensis identification and production of a recombinant fibrinogen binding protein from Staphylococcus lugdunensis using phage display and recombinant technology Author: NILSSON M; BJERKETORP J; GUSS B; FRYKBERG L Corporate Affiliate: Swedish Univ Agr Sci Corporate Source: Frykberg L, Swedish Univ Agr Sci, Dept Microbiol, POB 7025, SE-75007 Uppsala, Sweden Journal: FEMS MICROBIOLOGY LETTERS (241, 1, 87-93) 2004 ISSN: 0378-1097 Language: English A fibrinogen-binding protein of Staphylococcus lugdunensis identification and production of a recombinant fibrinogen binding protein from Staphylococcus lugdunensis using phage display and recombinant technology Abstract: AUTHOR ABSTRACT - A gene called fbl, encoding a Staphylococcus lugdunensis fibrinogen-binding protein, was identified by phage display. The encoded protein, Fbl, is a member of the Sdr-family, a group of staphylococcal cell surface proteins containing a characteristic serine-aspartate repeat region. The fibrinogen-binding domain was mapped to 313 amino acids, and shows, 62% identity to the corresponding region in clumping factor (ClfA) from Staphylococcus aureus. Anti- serum against ClfA cross-reacted with Fbl, and blocked S. lugdunensis adherence to fibrinogen. Twelve clinical isolates of S. lugdunensis analysed by Southern blot all had an fbl-like..

Descriptors: Staphylococcus lugdunensis, recombinant fibrinogen binding protein, prep, isol., characterization, phage display, fbl gene identification, Southern blot bacterium surface display...

>>>W: KWIC option is not available in file(s): 399
7/K/21 (Item 3 from file: 357) Links
Derwent Biotech Res.
(c) 2007 The Thomson Corp. All rights reserved.
0324377 DBA Accession No.: 2003-25518 PATENT
New antibody recognizing a Staphylococcus epidermidis protein comprising SdrG
N1N2N3, SdrG N2N3 or SdrGTR2 useful for preparing a composition for treating or preventing a coagulase-negative Staphylococcal infection chimeric antibody, humanized antibody, monoclonal antibody and single chain antibody production for vaccine, gene therapy and therapy

```
Author: PATTI J M; HUTCHINS J T; HALL A; DOMANSKI P; PATEL P; HOOK M; ROBBINS J;
VERNACHIO J; BOWDEN M G
Patent Assignee: INHIBITEX INC; UNIV TEXAS A and M SYSTEM
                                                                                                                                                           2003
Patent Number: WO 200376470 Patent Date: 20030918 WPI Accession No.: 2003-722324
   (200368)
Priority Application Number: US 361324 Application Date: 20020305
National Application Number: WO 2003US6415 Application Date: 20030305
Language: English
New antibody recognizing a Staphylococcus epidermidis protein comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2 useful for preparing a composition for treating or preventing a coagulase-negative Staphylococcal infection chimeric antibody,
humanized antibody, monoclonal antibody and single chain antibody production for
vaccine, gene therapy and therapy
Abstract: DERWENT ABSTRACT: NOVELTY - An isolated antibody (I) that recognizes a
protein from Staphylococcus epidermidis comprising SdrG N1N2N3, SdrG N2N3 or
SdrGTR2, is new. DÉTAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
(1) isolated....treating or preventing a coagulase-negative Staphylococcal infection; (7) an isolated S. epidermidis protein comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2; (8) eliciting an immunogenic reaction in a human or animal; (9) a... epidermidis protein; and (10) an isolated nucleic acid sequence encoding an S. epidermidis protein comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2. BIOTECHNOLOGY - Preferred Antibody: The antibody (I) is selected from chimeric, murine, humanized or human monoclonal antibodies. (I) is a single chain monoclonal antibody. (I) binds to the S. epidermidis SdrG protein. (T) recognizes an amino acid sequence selected from
human monoclonal antibodies. (I) is a single chain monoclonal antibody. (I) binds to the S. epidermidis SdrG protein. (I) recognizes an amino acid sequence selected from the fully defined sequence comprising 560....or 951 (S6) base pairs, respectively, as given in the specification. (II) and (III) are monoclonal antibodies. Preferred Kit: The kit comprises means for detecting binding by the antibody, which comprises a detectable label linked to the antibody. Preferred Protein: The isolated S. epidermidis protein comprising SdrG N1N2N3, SdrG N2N3 or SdrGTR2 comprises an amino acid sequence selected from S1-S3 encoded by a ... ... Staphylococcal infection in a human or an animal and inhibits binding of Staphylococcal bacteria to fibrinogen, useful for preparing a composition for treating or preventing a coagulase-negative Staphylococcal infection. The monoclonal antibodies (II) and (III) comprising 1092 amino acids and 549 amino acids, respectively are also... ... for treating or preventing a coagulase-negative
 respectively are also.......for treating or preventing a coagulase-negative Staphylococcal infection. An isolated S. epidermidis protein comprising SdrG N1N2N3,
 SdrG N2N3 or SdrGTR2 is administered to a human or animal to elicit an immune
 reaction..
Descriptors: Staphylococcus sp. epidermis-specific chimeric antibody, humanized antibody, monoclonal antibody, single chain antibody prep., appl. vaccine, gene therapy, therapy antibody engineering antibody engineering protein...
                  KWIC option is not available in file(s): 399
   7/K/22 (Item 1 from file: 149) Links
 TGG Health&Wellness DB(SM)
 (c) 2007 The Gale Group. All rights reserved.
01988263 Supplier Number: 73924880 (USE FORMAT 7 OR 9 FOR FULL TEXT )
 whole genome sequencing of meticillin-resistant Staphylococcus aureus.
 Kuroda, Makoto; Ohta, Toshiko; Uchiyama, Ikuo; Baba, Tadashi; Yuzawa, Harumi;
Kobayashi, Ichizo; Cui, Longzhu; Oguchi, Akio; Aoki, Ken-ichi; Nagai, Yoshimi; Lian,
Kopayasni, Icnizo; Cui, Longznu; Ugucni, AKio; AOKi, Ken-ichi; Nagai, Yoshimi; Lian, JianQi; Ito, Teruyo; Kanamori, Mutsumi; Matsumaru, Hiroyuki; Maruyama, Atsushi; Murakami, Hiroyuki; Hosoyama, Akira; Mizutani-Ui, Yoko; Takahashi, Noriko K; Sawano, Toshihiko; Inoue, Ryu-ichi; Kaito, Chikara; Sekimizu, Kazuhisa; Hirakawa, Hideki; Kuhara, Satoru; Goto, Susumu; Yabuzaki, Junko; Kanehisa, Minoru; Yamashita, Atsushi; Oshima, Kenshiro; Furuya, Keiko; Yoshino, Chie; Shiba, Tadayoshi; Hattori, Masahira; Ogasawara, Naotake; Hayashi, Hideo; Hiramatsu, Keiichi
The Lancet, 357, 9264, 1225
 April 21,
 2001
       Publication Format: Magazine/Journal; Refereed
                                                                                                     Page 16
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ISSN: 0099-5355

Language: English

Record Type: Fulltext; Abstract Target Audience: Professional Word Count: 10338 Line Count: 01076

Descriptors: Staphylococcus aureus--Genetic aspects; Genetic recombination--

Physiological aspects; Drug resistance--Genetic aspects

File Segment: HI File 149

...wall sorting signal in N315 and Mu50 genomes (table 4). These include seven known adhesins: fibrinogen-binding proteins ClfA, ClfB, and SdrC-D-E, and fibronectin-binding proteins FnbA and FnbB...

...to form clusters at several loci in the genome rather than being randomly distributed. The fibrinogen-binding proteins are characteristic in their possession of serine-aspartate repeats that precede the LPXTG...

...similar to Streptococcus pyogenes myosin-reactive protein, (30) which is known to react with the serum of patients with acute rheumatic fever. The other three open reading frames (SA1751, SA0841, and...Ryden C. A bone sialoprotein-binding protein from Staphylococcus aureus: a member of the staphylococcal Sdr family. Biochem J 2000; 345: 611-19.

(28) Schneewind O, Model P, Fischetti VA. Sorting...

haemolysin

SAS065 SA1973

Probable haemolysin g-haemolysin components

SA2207, 2208, 2209

Adhesins

Ser-Asp rich fibrinogen-binding proteins

SA0742, 2423, 0519, 0520, 0521 SA0587

Probable adhesin

Possible extracellular matrix

SA0744, 0745

binding proteins

SA1000, 1003, 1004

Possible fibrinogen-binding proteins Probable extracellular matrix

SA1267, 1268

binding proteins

Elastin-binding protein...

...adhesion proteins

SA2459, 2460, 2461, 2462

Others

Myosin-crossreactive MHC class

SA0102

II-like protein

SA0107

Immunoglobulin G binding protein A Possible siderophore biosynthesis

SA0116, 0117

proteins

Probable capsular polysaccharide SA0126...

d-haemolysin

hld

Probable haemolysin

g-haemolysin components

hlgA, hlgC, hlgB

Adhesins

Ser-Asp rich fibrinogen-binding proteins

clfA, clfB
sdrC, sdrD, sdrE

Probable adhesin

Possible extracellular matrix

binding proteins
Possible fibrinogen-binding proteins

Probable extracellular matrix

ebhA. ebhB

binding proteins

Elastin-binding protein

ebpS

Fibronectin-binding...

...Intercellular adhesion proteins

icaA, icaD, icaB, icaC

Others
Myosin-crossreactive MHC class
II-like protein
Immunoglobulin G binding protein A
Possible siderophore biosynthesis
proteins
Probable capsular polysaccharide
synthesis proteins
Capsular...

spa

...toxin 1 SaPIn1/SaPIm1 d-haemolysin Probable haemolysin q-haemolysin components

Adhesins
Ser-Asp rich fibrinogen-binding proteins
Probable adhesin
Possible extracellular matrix
binding proteins
Possible fibrinogen-binding proteins
Probable extracellular matrix
binding proteins
Elastin-binding protein
Fibronectin-binding proteins
Intercellular adhesion proteins

Others
Myosin-crossreactive MHC class
II-like protein
Immunoglobulin G binding protein A
Possible siderophore biosynthesis
proteins
Probable capsular polysaccharide
synthesis proteins
Capsular polysaccharide...

...cells
Probable haemolysin

g-haemolysin components

Adhesins
Ser-Asp rich fibrinogen
-binding proteins Cellular adhesion onto

Probable adhesin

Possible extracellular matrix binding proteins
Possible fibrinogen-binding proteins
Probable extracellular matrix binding proteins
Elastin-binding protein

...infected tissues
Others
Myosin-crossreactive MHC class
II-like protein
Immunoglobulin

Destruction of blood cells

host tissues
Cellular adhesion onto
host tissues
Cellular adhesion onto
host tissues
Unknown
Unknown

Cellular adhesion onto...

Potential immune disorder in host

G binding protein A

sdrgantibody.txt Potential immune disorder in host osynthesis Iron uptake

Possible siderophore biosynthesis proteins...



RESULT 23 for SEQ ID NO: 16 ABP40469 ID ABP40469 standard; protein; 930 AA. XX AC ABP40469; XX DT 24-JUL-2002 (first entry) XX DE Staphylococcus epidermidis ORF amino acid sequence SEO ID NO:5314. XX Staphylococcus epidermidis; open reading frame; ORF; bacterial infection; KW KW antibacterial; gene therapy. XX OS Staphylococcus epidermidis. XX PN US6380370-B1. XXPD 30-APR-2002. XXPF 13-AUG-1998; 98US-00134001. XX PR 14-AUG-1997; 97US-0055779P. PR 08-NOV-1997; 97US-0064964P. XXPA (GENO-) GENOME THERAPEUTICS CORP. XX PI Doucette-Stamm LA, Bush D; XX DR WPI; 2002-381255/41. DR N-PSDB; ABN93014. XX PT Novel isolated nucleic acid encoding a Staphylococcus epidermis PT polypeptide, useful for diagnosing and treating bacterial infections. XX PS Disclosure; SEQ ID NO 5314; 267pp; English. XX CC ABN90538 to ABN93374 represent Staphylococcus epidermidis open reading CC frame (ORF) nucleic acid sequences which encode the amino acid sequences CC given in ABP35124 to ABP37960. The S. epidermidis sequences have CC antibacterial activity and can be used in gene therapy. The sequences can CC also be used in the diagnosis and treatment of bacterial infections, CC particularly S. epidermidis infections. The sequences can be used to CC screen for compounds able to interfere with the S. epidermidis life cycle CC or inhibit S. epidermidis infection. N.B. The sequence data for this CC patent did not form part of the printed specification, but was obtained CC in electronic format directly from the USPTO web site

```
XX
SQ Sequence 930 AA;
                   100.0%; Score 51; DB 5; Length 930;
  Query Match
Best Local Similarity 100.0%; Pred. No. 13;
  Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
        1 TYTFTDYVD 9
 Qу
        Db
       369 TYTFTDYVD 377
 RESULT 24
 ADS06014
 ID ADS06014 standard; protein; 930 AA.
 XX
 AC ADS06014;
 XX
 DT 04-NOV-2004 (first entry)
 XX
 DE Staphylococcus epidermis polypeptide seqid 5309.
 XX
 KW antibacterial; vaccine; antisense therapy; Staphylococcus epidermidis;
 KW recombinant expression vector; infection; computer readable medium;
 KW computer based system.
 XX
 OS Staphylococcus epidermidis.
 XX
 PN US2004147734-A1.
 XX
 PD 29-JUL-2004.
 XX
 PF 01-DEC-2003; 2003US-00724972.
 XX
 PR 08-NOV-1997; 97US-0064964P.
 PR 13-AUG-1998; 98US-00134001.
 PR 29-NOV-1999; 99US-00450969.
 XX
 PA (DOUC/) DOUCETTE-STAMM L.
 PA (BUSH/) BUSH D.
 XX
 PI Doucette-Stamm L, Bush D;
 XX
 DR WPI; 2004-580138/56.
 DR N-PSDB; ADS02242.
 XX
```

```
PT New isolated polypeptide and encoding nucleic acid derived from
PT Staphylococcus epidermidis, useful for diagnosing, preventing and/or
PT treating an S. epidermidis bacterial infection.
XX
PS Claim 17; SEQ ID NO 5309; 741pp; English.
XX
CC The invention describes an isolated nucleic acid comprising a nucleotide
CC sequence with any of 3772 fully defined nucleotide sequences (SEQ ID NO:
CC 1-3772) and encoding an Staphylococcus epidermidis polypeptide with any
CC of 3772 fully defined amino acid sequences (SEQ ID NO: 3772-7544) as
CC given in the specification. Also described are: a recombinant expression
CC vector; a cell comprising a recombinant expression vector of (1);
CC producing an S. epidermidis polypeptide; an isolated nucleic acid
CC comprising a nucleotide sequence of at least 8 nucleotides in length; a
CC vaccine composition for prevention or treatment of an S. epidermidis
CC infection, comprising a nucleic acid cited above and a carrier; treating
CC a subject for S. epidermidis infection; a recombinant or substantially
CC pure preparation of an S. epidermidis polypeptide or its fragment; a
CC vaccine composition for prevention or treatment of an S. epidermidis
CC infection; detecting the presence of a Staphylococcus nucleic acid in a
CC sample; a computer readable medium having recorded in it the nucleotide
CC sequences with SEQ ID NO: 1-3772 or its fragments; a computer based
CC system for identifying fragments of the Staphylococcus genome of
CC commercial importance; a computer based system for identifying fragments
CC of the Staphylococcus plasmids of commercial importance; identifying
CC commercially important nucleic acid fragments of the Staphylococcus
CC genome and/or plasmids; and identifying an expression modulating fragment
CC of the Staphylococcus genome and/or plasmids. The methods and
CC compositions of the present invention are useful for the diagnosis,
CC prevention and/or treatment of an Staphylococcal epidermidis bacterial
CC infection. This is the amino acid sequence of a S. epidermis protein of
CC the invention.
XX
SQ Sequence 930 AA;
                     100.0%; Score 51; DB 8; Length 930;
 Ouery Match
 Best Local Similarity 100.0%; Pred. No. 13;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
         1 TYTFTDYVD 9
Qу
        Db
        369 TYTFTDYVD 377
ESULT 25
AEI12097
ID AEI12097 standard; protein; 930 AA.
```

```
XX
AC AEI12097;
XX
DT 10-AUG-2006 (first entry)
XX
DE Staphylococcus epidermidis protein amino acid sequence - SEQ ID 5309.
XX
KW staphylococcus infection; bacterial infection; antibacterial; vaccine;
KW diagnostic.
XX
OS Staphylococcus epidermidis.
XX
PN US7060458-B1.
XX
PD 13-JUN-2006.
XX
PF 29-NOV-1999; 99US-00450969.
XX
PR 14-AUG-1997; 97US-0055779P.
PR 08-NOV-1997; 97US-0064964P.
PR 13-AUG-1998; 98US-00134001.
XX
PA (AMHP) WYETH.
XX
PI Doucette-Stamm L, Bush D;
XX
DR WPI; 2006-413026/42.
DR N-PSDB; AEI08325.
XX
PT New nucleic acid encoding Staphylococcus epidermidis polypeptide, useful
PT for detecting, treating and preventing pathological conditions resulting
PT from bacterial infections.
XX
PS Disclosure; SEQ ID NO 5309; 588pp; English.
XX
CC The invention comprises the amino acid and coding sequences of
CC Staphylococcus epidermidis proteins, useful for detecting, treating, and
CC preventing (e.g. vaccine) bacterial infections. The present amino acid
CC sequence represents a Staphylococcus epidermidis protein of the
CC invention.
XX
SO Sequence 930 AA;
                    100.0%; Score 51; DB 10; Length 930;
 Ouery Match
 Best Local Similarity 100.0%; Pred. No. 13;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
1 TYTFTDYVD 9
Qу
       Db
      369 TYTFTDYVD 377
RESULT 39
AAY08642
ID AAY08642 standard; protein; 1315 AA.
XX
AC AAY08642;
XX
DT 20-MAR-2003 (revised)
DT 09-AUG-1999 (first entry)
XX
DE S. aureus SdrD protein.
XX
KW Fibringen-binding protein; alpha chain; beta chain; ClfB; SdrC; SdrD;
KW SdrE; fibrinogen; medical device; competitive inhibitor; pharmaceutical;
KW treatment; infection; septicemia; osteomyelitis; mastitis; endocarditis;
KW extracellular matrix; vascular graft; vascular stent; vaccine;
KW intravenous catheter; artificial heart valve; cardiac assist device;
KW antibacterial.
XX
OS Staphylococcus aureus.
XX
PN WO9927109-A2.
XX
PD 03-JUN-1999.,
XX
PF 25-NOV-1998; 98WO-US025246.
XX
PR 26-NOV-1997; 97US-0066815P.
PR 31-AUG-1998; 98US-0098427P.
XX
PA (INHI-) INHIBITEX INC.
PA (FORF-) FORFAS T/A BIORESEARCH IRELAND.
PA (TEXA) UNIV TEXAS A & M.
PA (PATT/) PATTI J M.
PA (FOST/) FOSTER T J.
PA (JOSE/) JOSEFSSON E.
PA (EIDH/) EIDHIN D N.
PA (HOOK/) HOOK M A O.
PA (PERK/) PERKINS S E.
XX
PI Patti JM, Foster TJ, Josefsson E, Eidhin DN, Hook MAO;
PI Perkins SE:
```

```
XX
DR WPI; 1999-357844/30.
DR N-PSDB; AAX77593.
XX
PT Staphylococcus aureus fibrinogen-binding proteins for treating
PT septicemia, osteomyelitis, mastitis or endocarditis.
XX
PS Claim 8; Fig 8; 143pp; English.
XX
CC This invention describes novel Staphylococcus aureus fibrinogen-binding
CC proteins that bind both the alpha and beta fibringen chains. The
CC proteins (and their encoding nucleic acids are ClfB, SdrC, SdrD and
CC SdrE). Staphylococcus aureus is thought to utilize fibrinogen to adhere
CC to medical devices, binding proteins that bind both the alpha and beta
CC fibringen chains (ClfB, SdrC, SdrD and SdrE) can therefore be used as
CC competitive inhibitors to block this binding. Antibodies against ClfB,
CC SdrC, SdrD and SdrE inhibit ClfB, SdrC, SdrD and SdrE mediated binding.
CC The proteins of the invention can be used in a pharmaceutical composition
CC for the treatment of Staphylococcus aureus infection e.g. septicemia,
CC osteomyelitis, mastitis or endocarditis or to inhibit the binding of S.
CC aureus to the extracellular matrix. The proteins or their fragments may
CC be used to coat a medical device to reduce the S. aureus infection of an
CC indwelling medical device, especially where the medical device is
CC selected from the group consisting of vascular grafts, vascular stents,
CC intravenous catheters, artificial heart valves, and cardiac assist
CC devices. ClfB, SdrC, SdrD, SdrE, or an active fragment, subdomain or
CC encoding gene may be used as a vaccine. The DS (aspartate serine) repeat
CC region or a gene encoding it may be used as an identifying probe for the
CC identification of genes and encoding proteins from Staphylococcus aureus
CC (other than CIfA), S. hemolyticus, S. lugdenensis, and S. schleriferi.
CC The proteins of the invention have antibacterial activity. (Updated on 20
CC -MAR-2003 to correct PA field.)
XX
SQ Sequence 1315 AA;
 Ouery Match
                     100.0%; Score 51; DB 2; Length 1315;
 Best Local Similarity 100.0%; Pred. No. 19;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qу
         1 TYTFTDYVD 9
        Db
       339 TYTFTDYVD 347
RESULT 11
O70022 STAEP
ID O70022 STAEP PRELIMINARY; PRT; 1092 AA.
```

```
AC 070022;
DT 01-AUG-1998, integrated into UniProtKB/TrEMBL.
DT 01-AUG-1998, sequence version 1.
DT 13-JUN-2006, entry version 30.
DE Fibrinogen-binding protein precursor.
OS Staphylococcus epidermidis.
OC Bacteria; Firmicutes; Bacillales; Staphylococcus.
OX NCBI TaxID=1282;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RC STRAIN=HB;
RX MEDLINE=98261511; PubMed=9596732;
RA Nilsson M., Frykberg L., Flock J.I., Pei L., Lindberg M., Guss B.;
RT "A fibringen-binding protein of Staphylococcus epidermidis.";
RL Infect. Immun. 66:2666-2673(1998).
CC -----
CC Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms
CC Distributed under the Creative Commons Attribution-NoDerivs License
CC -----
DR EMBL; Y17116; CAA76638.1; -; Genomic DNA.
DR PIR; T30214; T30214.
DR HSSP; Q53653; 1N67.
DR SMR; O70022; 278-598.
DR GO; GO:0009986; C:cell surface; IEA.
DR GO; GO:0005618; C:cell wall; IEA.
DR GO; GO:0016020; C:membrane; IEA.
DR InterPro; IPR008966; Adhes bact.
DR InterPro; IPR008454; Cna B.
DR InterPro; IPR005877; Gpos YSIRK.
DR InterPro; IPR001899; Gram pos anchor.
DR Pfam; PF05738; Cna B; 2.
DR Pfam; PF00746; Gram pos anchor; 1.
DR Pfam; PF04650; YSIRK signal; 1.
DR TIGRFAMs; TIGR01167; LPXTG anchor; 1.
DR TIGRFAMs; TIGR01168; YSIRK signal; 1.
DR PROSITE; PS50847; GRAM POS ANCHORING; 1.
KW Cell wall; Peptidoglycan-anchor; Signal.
FT SIGNAL
                   51
                        Potential.
               1
FT CHAIN
              52 1092
                         fibrinogen-binding protein.
SQ SEQUENCE 1092 AA; 119293 MW; 6542BC39AAD8B984 CRC64;
 Ouery Match
                  100.0%; Score 51; DB 2; Length 1092;
 Best Local Similarity 100.0%; Pred. No. 1.7;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

Db

372 TYTFTDYVD 380

```
RESULT 4
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US-09-147-405B-13

; Sequence 13, Application US/09147405B

; Patent No. 6733758

; GENERAL INFORMATION:

; APPLICANT: Guss, Bengt

; APPLICANT: Nilsson, Martin

; APPLICANT: Frykberg, Lars

; APPLICANT: Flock, Jan-Ingmar

APPLICANT: Lindberg, Martin

; TITLE OF INVENTION: Fibrinogen Binding Protein Originating from

; TITLE OF INVENTION: Coagulase-Negative Staphylococcus

; FILE REFERENCE: guss 09/147405

; CURRENT APPLICATION NUMBER: US/09/147,405B

CURRENT FILING DATE: 1999-04-11

; PRIOR APPLICATION NUMBER: PCT/SE97/10191

; PRIOR FILING DATE: 1997-06-18

: PRIOR APPLICATION NUMBER: SE 9602496-3

; PRIOR FILING DATE: 1996-06-20

NUMBER OF SEQ ID NOS: 15

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 13

LENGTH: 582

TYPE: PRT

; ORGANISM: Staphylococcus epidermidis

US-09-147-405B-13

Query Match 100.0%; Score 51; DB 2; Length 582;

Best Local Similarity 100.0%; Pred. No. 1.7;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TYTFTDYVD 9

Db 298 TYTFTDYVD 306

RESULT 5

US-09-147-405B-11

; Sequence 11, Application US/09147405B

; Patent No. 6733758

; GENERAL INFORMATION:

; APPLICANT: Guss, Bengt

; APPLICANT: Nilsson, Martin

; APPLICANT: Frykberg, Lars

```
; APPLICANT: Flock, Jan-Ingmar
APPLICANT: Lindberg, Martin
 TITLE OF INVENTION: Fibrinogen Binding Protein Originating from
TITLE OF INVENTION: Coagulase-Negative Staphylococcus
FILE REFERENCE: guss 09/147405
 CURRENT APPLICATION NUMBER: US/09/147,405B
 CURRENT FILING DATE: 1999-04-11
 PRIOR APPLICATION NUMBER: PCT/SE97/10191
PRIOR FILING DATE: 1997-06-18
 PRIOR APPLICATION NUMBER: SE 9602496-3
 PRIOR FILING DATE: 1996-06-20
NUMBER OF SEQ ID NOS: 15
 SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 11
LENGTH: 593
 TYPE: PRT
 ORGANISM: Staphylococcus epidermidis
US-09-147-405B-11
                  100.0%; Score 51; DB 2; Length 593;
Query Match
Best Local Similarity 100.0%; Pred. No. 1.8;
Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
       1 TYTFTDYVD 9
Qу
       Db
      305 TYTFTDYVD 313
RESULT 6
US-09-134-001C-5314
; Sequence 5314, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES
RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND
THERAPEUTICS
: FILE REFERENCE: GTC-007
CURRENT APPLICATION NUMBER: US/09/134,001C
CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
: PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 5314
```

```
; LENGTH: 930
TYPE: PRT
ORGANISM: Staphylococcus epidermidis
US-09-134-001C-5314
                  100.0%; Score 51; DB 2; Length 930;
 Ouery Match
 Best Local Similarity 100.0%; Pred. No. 2.8;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
       1 TYTFTDYVD 9
Qу
       Db
      369 TYTFTDYVD 377
RESULT 8
US-09-147-405B-15
; Sequence 15, Application US/09147405B
: Patent No. 6733758
; GENERAL INFORMATION:
; APPLICANT: Guss, Bengt
; APPLICANT: Nilsson, Martin
; APPLICANT: Frykberg, Lars
; APPLICANT: Flock, Jan-Ingmar
; APPLICANT: Lindberg, Martin
TITLE OF INVENTION: Fibrinogen Binding Protein Originating from
TITLE OF INVENTION: Coagulase-Negative Staphylococcus
; FILE REFERENCE: guss 09/147405
: CURRENT APPLICATION NUMBER: US/09/147,405B
; CURRENT FILING DATE: 1999-04-11
 PRIOR APPLICATION NUMBER: PCT/SE97/10191
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: SE 9602496-3
 PRIOR FILING DATE: 1996-06-20
; NUMBER OF SEQ ID NOS: 15
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 15
 LENGTH: 1092
: TYPE: PRT
 ORGANISM: Staphylococcus epidermidis
US-09-147-405B-15
                  100.0%; Score 51; DB 2; Length 1092;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 3.3;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
       1 TYTFTDYVD 9
Qу
```

Db 372 TYTFTDYVD 380

; Patent No. 6380370

; GENERAL INFORMATION:

; APPLICANT: Lynn Doucette-Stamm et al

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RESULT 22
US-10-724-972A-5309
; Sequence 5309, Application US/10724972A
; Publication No. US20040147734A1
; GENERAL INFORMATION:
; APPLICANT: Doucette-Stamm, Lynn
; APPLICANT: Bush, David
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES
RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND
THERAPEUTICS
; FILE REFERENCE: PATH03-16
CURRENT APPLICATION NUMBER: US/10/724,972A
 CURRENT FILING DATE: 2003-12-01
 PRIOR APPLICATION NUMBER: 09/450,969
 PRIOR FILING DATE: 1999-11-29
 PRIOR APPLICATION NUMBER: 09/134,001
 PRIOR FILING DATE: 1998-08-13
 PRIOR APPLICATION NUMBER: 60/064,964
 PRIOR FILING DATE: 1997-11-08
 PRIOR APPLICATION NUMBER: 60/055,779
 PRIOR FILING DATE: 1997-08-14
 NUMBER OF SEQ ID NOS: 7544
 SEQ ID NO 5309
 LENGTH: 930
 TYPE: PRT
 ORGANISM: S.epidermidis
US-10-724-972A-5309
                  100.0%; Score 51; DB 4; Length 930;
 Ouery Match
 Best Local Similarity 100.0%; Pred. No. 9.7;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
       1 TYTFTDYVD 9
Qy
       369 TYTFTDYVD 377
Db
SEQ iD no. 10
RESULT 2
US-09-134-001C-5314
; Sequence 5314, Application US/09134001C
```

; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS ; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

; FILE REFERENCE: GTC-007

; CURRENT APPLICATION NUMBER: US/09/134,001C

CURRENT FILING DATE: 1998-08-13

; PRIOR APPLICATION NUMBER: US 60/064,964

; PRIOR FILING DATE: 1997-11-08

; PRIOR APPLICATION NUMBER: US 60/055,779

; PRIOR FILING DATE: 1997-08-14 ; NUMBER OF SEQ ID NOS: 5674

; SEQ ID NO 5314 ; LENGTH: 930 : TYPE: PRT

; ORGANISM: Staphylococcus epidermidis

US-09-134-001C-5314

Query Match 99.9%; Score 4820; DB 2; Length 930; Best Local Similarity 99.9%; Pred. No. 5.2e-256;

Matches 929; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 LKKNNLLTKKKPIANKSNKYAIRKFTVGTASIVIGAALLFGLGHNEAKAEENTVQ DVKDS 60

Db

LKKNNLLTKKKPIANKSNKYAIRKFTVGTASIVIGATLLFGLGHNEAKAEENTVQ DVKDS 60

Qy 61 NMDDELSDSNDQSSNEEKNDVINNSQSINTDDDNQIKKEETNSNDAIENRSKDIT OSTTN 120

Db 61

NMDDELSDSNDQSSNEEKNDVINNSQSINTDDDNQIKKEETNSNDAIENRSKDIT QSTTN 120

Qy 121 VDENEATFLQKTPQDNTQLKEEVVKEPSSVESSNSSMDTAQQPSHTTINSEASIQT SDNE 180

Db 121

VDENEATFLQKTPQDNTQLKEEVVKEPSSVESSNSSMDTAQQPSHTTINSEASIQT SDNE 180

181 Qy ENSRVSDFANSKIIESNTESNKEENTIEOPNKVREDSITSOPSSYKNIDEKISNODEL Db 181 ENSRVSDFANSKIIESNTESNKEENTIEQPNKVREDSITSQPSSYKNIDEKISNQDEL 241 Qу LPINEYENKVRPLSTTSAQPSSKRVTVNQLAAEQGSNVNHLIKVTDQSITEGYDD SDGII 300 Db 241 LPINEYENKVRPLSTTSAQPSSKRVTVNQLAAEQGSNVNHLIKVTDQSITEGYDD SDGII 300 Oy KAHDAENLIYDVTFEVDDKVKSGDTMTVNIDKNTVPSDLTDSFAIPKIKDNSGEII **ATGT 360** Db 301 KAHDAENLIYDVTFEVDDKVKSGDTMTVNIDKNTVPSDLTDSFAIPKIKDNSGEII **ATGT 360** 361 Qу YDNTNKQITYTFTDYVDKYENIKAHLKLTSYIDKSKVPNNNTKLDVEYKTALSS VNKTIT 420 YDNTNKQITYTFTDYVDKYENIKAHLKLTSYIDKSKVPNNNTKLDVEYKTALSS VNKTIT 420 Qy VEYQKPNENRTANLQSMFTNIDTKNHTVEQTIYINPLRYSAKETNVNISGNGDEG STIID 480 Db VEYQKPNENRTANLQSMFTNIDTKNHTVEQTIYINPLRYSAKETNVNISGNGDEG **STIID 480**

Qy 481
DSTIIKVYKVGDNQNLPDSNRIYDYSEYEDVTNDDYAQLGNNNDVNINFGNIDSP
YIIKV 540 .

Db 481

DSTIIKVYKVGDNQNLPDSNRIYDYSEYEDVTNDDYAQLGNNNDVNINFGNIDSP YIIKV 540

Qy 541

 ${\tt ISKYDPNKDDYTTIQQTVTMQTTINEYTGEFRTASYDNTIAFSTSSGQGQGDLPPEKTYK\,600}$

Db 541

ISKYDPNKDDYTTIQQTVTMQTTINEYTGEFRTASYDNTIAFSTSSGQGQGDLPPE KTYK 600

Qy 601

IGDYVWEDVDKDGIQNTNDNEKPLSNVLVTLTYPDGTSKSVRTDEEGKYQFDGL KNGLTY 660

Db 601

IGDYVWEDVDKDGIQNTNDNEKPLSNVLVTLTYPDGTSKSVRTDEEGKYQFDGL KNGLTY 660

Oy 661

KITFETPEGYTPTLKHSGTNPALDSEGNSVWVTINGQDDMTIDSGFYQTPKYSLG NYVWY 720

Db 661

KITFETPEGYTPTLKHSGTNPALDSEGNSVWVTINGQDDMTIDSGFYQTPKYSLG NYVWY 720

Qy 721

DTNKDGIQGDDEKGISGVKVTLKDENGNIISTTTTDENGKYQFDNLNSGNYIVHF DKPSG 780

Db 721

DTNKDGIQGDDEKGISGVKVTLKDENGNIISTTTTDENGKYQFDNLNSGNYIVHF DKPSG 780

Qy 781

MTQTTTDSGDDDEQDADGEEVHVTITDHDDFSIDNGYYDDDSDSDSDSDSDSDD SDSDSD 840

Db 781

Db 841

SDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDKNTKDKLPDTG ANEDH 900

Qy 901 DSKGTLLGALFAGLGALLLGKRRKNRKNKN 930

Db 901 DSKGTLLGALFAGLGALLLGKRRKNRKNKN 930

RESULT 3

US-11-208-208-5314

; Sequence 5314, Application US/11208208

; Publication No. US20070053936A1

: GENERAL INFORMATION:

; APPLICANT: Lynn Doucette-Stamm et al

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES

RELATING TO STAPHYLOCOCCUS

: TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND

THERAPEUTICS

; FILE REFERENCE: 032796-101

; CURRENT APPLICATION NUMBER: US/11/208,208

; CURRENT FILING DATE: 2005-08-22

; PRIOR APPLICATION NUMBER: US/10/902,441

; PRIOR FILING DATE: 2004-07-30

; PRIOR APPLICATION NUMBER: US 09/134,001

PRIOR FILING DATE: 1998-08-13

; PRIOR APPLICATION NUMBER: US 60/064,964

; PRIOR FILING DATE: 1997-11-08

; PRIOR APPLICATION NUMBER: US 60/055,779

; PRIOR FILING DATE: 1997-08-14

; NUMBER OF SEQ ID NOS: 5676

SEQ ID NO 5314

LENGTH: 930

: TYPE: PRT

; ORGANISM: Staphylococcus epidermidis

US-11-208-208-5314

Query Match 99.9%; Score 4820; DB 7; Length 930;

Best Local Similarity 99.9%; Pred. No. 9.1e-200;

Matches 929; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qу LKKNNLLTKKKPIANKSNKYAIRKFTVGTASIVIGAALLFGLGHNEAKAEENTVQ **DVKDS 60** Db LKKNNLLTKKKPIANKSNKYAIRKFTVGTASIVIGATLLFGLGHNEAKAEENTVQ **DVKDS 60** Qy NMDDELSDSNDQSSNEEKNDVINNSQSINTDDDNQIKKEETNSNDAIENRSKDIT **OSTTN 120** · Db 61 NMDDELSDSNDQSSNEEKNDVINNSQSINTDDDNQIKKEETNSNDAIENRSKDIT OSTTN 120 Qу VDENEATFLQKTPQDNTQLKEEVVKEPSSVESSNSSMDTAQQPSHTTINSEASIQT **SDNE 180** Db VDENEATFLQKTPQDNTQLKEEVVKEPSSVESSNSSMDTAQQPSHTTINSEASIQT **SDNE 180** 181 Qy ENSRVSDFANSKIIESNTESNKEENTIEQPNKVREDSITSQPSSYKNIDEKISNQDEL LN 240 Db ENSRVSDFANSKIIESNTESNKEENTIEQPNKVREDSITSQPSSYKNIDEKISNQDEL Qу LPINEYENKVRPLSTTSAQPSSKRVTVNQLAAEQGSNVNHLIKVTDQSITEGYDD **SDGII 300** Db LPINEYENKVRPLSTTSAQPSSKRVTVNQLAAEQGSNVNHLIKVTDQSITEGYDD **SDGII 300** Qу KAHDAENLIYDVTFEVDDKVKSGDTMTVNIDKNTVPSDLTDSFAIPKIKDNSGEII ATGT 360

KAHDAENLIYDVTFEVDDKVKSGDTMTVNIDKNTVPSDLTDSFAIPKIKDNSGEII ATGT 360

Qy 361

YDNTNKQITYTFTDYVDKYENIKAHLKLTSYIDKSKVPNNNTKLDVEYKTALSS VNKTIT 420

Db 361

YDNTNKQITYTFTDYVDKYENIKAHLKLTSYIDKSKVPNNNTKLDVEYKTALSS VNKTIT 420

Oy 421

VEYQKPNENRTANLQSMFTNIDTKNHTVEQTIYINPLRYSAKETNVNISGNGDEG STIID 480

Db 421

VEYQKPNENRTANLQSMFTNIDTKNHTVEQTIYINPLRYSAKETNVNISGNGDEG STIID 480

Qy 481

DSTIIKVYKVGDNQNLPDSNRIYDYSEYEDVTNDDYAQLGNNNDVNINFGNIDSP YIIKV 540

Db 481

DSTIIKVYKVGDNQNLPDSNRIYDYSEYEDVTNDDYAQLGNNNDVNINFGNIDSP YIIKV 540

Qy 541

ISKYDPNKDDYTTIQQTVTMQTTINEYTGEFRTASYDNTIAFSTSSGQGQGDLPPE KTYK 600

Db 541

ISKYDPNKDDYTTIQQTVTMQTTINEYTGEFRTASYDNTIAFSTSSGQGQGDLPPE KTYK 600

Qy · 601

IGDYVWEDVDKDGIQNTNDNEKPLSNVLVTLTYPDGTSKSVRTDEEGKYQFDGL KNGLTY 660

Db 601

IGDYVWEDVDKDGIQNTNDNEKPLSNVLVTLTYPDGTSKSVRTDEEGKYQFDGL KNGLTY 660

KITFETPEGYTPTLKHSGTNPALDSEGNSVWVTINGQDDMTIDSGFYQTPKYSLG NYVWY 720

Db 661

KITFETPEGYTPTLKHSGTNPALDSEGNSVWVTINGQDDMTIDSGFYQTPKYSLG NYVWY 720

Qy 721

DTNKDGIQGDDEKGISGVKVTLKDENGNIISTTTTDENGKYQFDNLNSGNYIVHF DKPSG 780

Db 721

DTNKDGIQGDDEKGISGVKVTLKDENGNIISTTTTDENGKYQFDNLNSGNYIVHF DKPSG 780

'Qy 781

MTQTTTDSGDDDEQDADGEEVHVTITDHDDFSIDNGYYDDDSDSDSDSDSDSDDD SDSDSD 840

Db 781

Qy 841

SDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDKNTKDKLPDTG ANEDH 900

Db 841

SDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDSDKNTKDKLPDTG ANEDH 900

Qy 901 DSKGTLLGALFAGLGALLLGKRRKNRKNKN 930

Db 901 DSKGTLLGALFAGLGALLLGKRRKNRKNKN 930

RESULT 8

AAV04279

ID AAV04279 standard; DNA; 3600 BP.

XX

AC AAV04279;

XX

DT 17-OCT-2003 (revised)

DT 22-JUN-1998 (first entry)

XX

```
DE Staphylococcus epidermidis fibrinogen binding protein fig gene.
XX
KW Fibrinogen binding protein; fig gene; aggregation; infection;
KW coagulase-negative Staphylococcus; therapy; diagnosis; immunisation;
KW vaccine; ss.
XX
OS Staphylococcus epidermidis; strain HB.
XX
FH Key
               Location/Qualifiers
FT RBS
               22. .27
FT
             /*tag= a
FT CDS
               33..3311
FT
             /*tag= b
FT sig peptide 33..185
FT
             /*tag= c
FT mat peptide 186. .3308
FT
             /*tag= d
FT repeat region 2502..3151
FT
             /*tag= e
FT
             /note= "contains 18-bp sequence unit, repeated 36 times,
             consensus GAXTCXGAXTCXGAXAGX, encoding Asp-Ser
FT
FT
             dipeptides"
                2502..2519
FT repeat unit
FT
             /*tag= f
FT
             /number= 1
FT repeat unit
                2520. .2531
FT
             /*tag=g
FT
             /number= 2
FT
             /note= "truncated repeat unit"
FT repeat unit
                2532. .2549
FT
             /*tag= h
FT
             /number= 3
                2550. .2567
FT repeat unit
FT
             /*tag= i
FT
             /number= 4
                2568. .2585
FT repeat unit
FT
             /*tag= j
FT
             /number= 5
FT repeat_unit
                2586. .2603
FT
             /*tag= k
FT
             /number= 6
                2604. .2621
FT repeat unit
FT ·
             /*tag= 1
FT
             /number= 7
                2622. .2639
FT repeat unit
FT
             /*tag= m
```

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/number= 8
FT
FT repeat unit 2640. .2657
FT
            /*tag= n
FT
            /number= 9
FT repeat unit 2658. .2675
FT
            /*tag= o
FT
            /number= 10
FT repeat unit 2676. .2693
FT
            /*tag= p
FT
            /number= 11
FT repeat unit 2694. .2711
FT
            /*tag= q
FT
            /number= 12
FT repeat unit 2712. .2729
FT
            /*tag= r
FT
            /number= 13
FT repeat unit 2730..2747
FT
            /*tag= s
            /number= 14
FT
FT repeat_unit 2748..2765
FT
            /*tag=t
            /number= 15
FT
FT repeat_unit 2766. .2783
FT
            /*tag= u
FT
            /number= 16
FT repeat unit 2784. .2801
FT
            /*tag= v
FT
            /number= 17
FT repeat unit 2802..2819
FT
            /*tag= w
FT
            /number= 18
FT repeat unit 2820. .2837
FT
            /*tag= x
FT
            /number= 19
FT repeat unit 2838..2855
FT
            /*tag= y
FT
             /number= 20
FT repeat unit 2856. .2873
FT
            /*tag= z
FT
             /number= 21
FT repeat unit 2874. .2891
FT
            /*tag= aa
FT
             /number= 22
FT repeat unit 2892. .2909
            /*tag= ab
FT
FT
             /number= 23
```

```
FT repeat_unit 2910..2927
FT
            /*tag= ac
FT
            /number= 24
FT repeat unit 2928. .2945
FT
            /*tag= ad
FT
            /number= 25
FT repeat unit 2944. .2961
FT
            /*tag= ae
FT
            /number= 26
FT repeat_unit 2962..2979
FT
            /*tag= af
FT
            /number= 27
FT repeat unit 2980. .2997
FT
            /*tag= ag
FT
            /number= 28
FT repeat unit 2998. .3015
FT
            /*tag= ah
FT
            /number= 29
FT repeat unit 3016..3033
FT
            /*tag= ai
FT
            /number= 30
FT repeat unit 3034..3051
FT
            /*tag= ai
FT
            /number= 31
FT repeat unit 3052..3069
FT
            /*tag= ak
FT
            /number = 32
FT
            /note= "slight disruption of consensus"
FT repeat unit 3070..3087
FT
            /*tag= al
FT
            /number= 33
FT repeat_unit 3088..3105
FT
             /*tag= am
FT
             /number= 34
FT
            /note= "slight disruption of consensus"
FT repeat unit 3106..3123
FT
             /*tag= an
FT
            /number= 35
FT repeat unit 3124..3151
FT
             /*tag= ao
FT
             /number= 36
FT
             /note= "slight disruption of consensus"
FT repeat unit
                3457. .3463
FT
             /*tag= ap
FT
            /rpt_type= INVERTED
FT repeat unit 3471..3477
```

```
FT
             /*tag= aq
FT
             /rpt type= INVERTED
FT repeat unit
                 3571..3578
FT
             /*tag= ar
FT
             /rpt type= INVERTED
FT repeat unit
                 3584. .3591
FT
             /*tag= as
FT
             /rpt type= INVERTED
XX
PN WO9748727-A1.
XX
PD 24-DEC-1997.
XX
PF 18-JUN-1997; 97WO-SE001091.
XX
PR 20-JUN-1996; 96SE-00002496.
XX
PA (GUSS/) GUSS B.
PA (NILS/) NILSSON M.
PA (FRYK/) FRYKBERG L.
PA (FLOC/) FLOCK J.
PA (LIND/) LINDBERG M.
XX
PI Guss B, Nilsson M, Frykberg L, Flock J, Lindberg M;
XX
DR WPI; 1998-063079/06.
DR P-PSDB; AAW41602.
XX
PT Fibrinogen-binding protein from coagulase-negative Staphylococcus - used
PT for prevention, treatment and diagnosis of Staphylococcus infection.
XX
PS Example 3; Fig 6; 45pp; English.
XX
CC The fig gene of coagulase-negative Staphylococcus epidermidis HB codes
CC for a 1092-amino acid fibrinogen binding protein (see AAW41602)
CC designated FIG. To isolate the gene, a phage library of HB was screened
CC for binding to fibringen-coated wells. Clone pSE100 was obtained that
CC encoded an incomplete FIG protein. The 3' and 5' ends were obtained by
CC screening chromosomal DNA using a probe generated by PCR (see AAV04280-
CC 81). The fig gene can be used in the recombinant production of FIG, and
CC also as a DNA vaccine to protect humans and animals against coagulase-
CC negative Staphylococcus infection. Probes based on the fig gene can be
CC used to identify S. epidermidis; fig is present in all strains of this
CC species but not in other staphyococci. Probes can also be used to
CC fingerprint strains (e.g. to identify a source of infection) and to
CC isolate similar genes from other species. (Updated on 17-OCT-2003 to
```

CC standardise OS field)

XX

SQ Sequence 3600 BP; 1418 A; 554 C; 665 G; 963 T; 0 U; 0 Other;

Query Match 81.9%; Score 2438.8; DB 2; Length 3600;

Best Local Similarity 94.8%; Pred. No. 0;

Matches 2559; Conservative 0; Mismatches 127; Indels 14; Gaps 3;

Qy 66 TACATTGAAATAGTCAAAGATAAGGAGTTTTTATGATTA--AAAAAAAATAATTTACTAA 123

Db

Qy 124

CTAAAAAGAAACCTATAGCAAATAAATCCAATAAATATGCAATTAGAAAATT CACAGTAG 183

Db 61

CTAAAAAGAAACCTATAGCAAATAAATCCAATAAATATGCAATTAGAAAATT CACAGTAG 120

Qy 184

GTACAGCGTCTATTGTAATAGGTGCAGCATTATTGTTTGGTTTAGGTCATAAT GAGGCCA 243

Db 121

GTACAGCGTCTATTGTAATAGGTGCAACATTATTGTTTGGTTTAGGTCATAAT GAGGCCA 180

Qy 244

AAGCTGAGGAGAATACAGTACAAGACGTTAAAGATTCGAATATGGATGATG AATTATCAG 303

Db 181

AAGCCGAGGAGAATTCAGTACAAGACGTTAAAGATTCGAATACGGATGATG AATTATCAG 240

Qy 304

ATAGCAATGATCAGTCCAGTAATGAAGAAAAGAATGATGTAATCAATAATAG TCAGTCAA 363

Db 241

ACAGCAATGATCAGTCTAGTGATGAAGAAAAGAATGATGTGATCAATAATAA TCAGTCAA 300

Qy 364 TAAACACCGATGATGATAACCAAATA---AAAAAAGAAGAAACGAATGCAACGATGCCA 420

Db 301

TAAACACCGACGATAATAACCAAATAATTAAAAAAGAAGAAACGAATAACT ACGATGGCA 360

Qy 421

TAGAAAATCGCTCTAAAGATATAACACAGTCAACAACAAATGTAGATGAAAA CGAAGCAA 480

Db 361

TAGAAAAACGCTCAGAAGATAGAACAGAGTCAACAACAAATGTAGATGAAA ACGAAGCAA 420

Qy 481

CATTTTTACAAAAGACCCCTCAAGATAATACTCAGCTTAAAGAAGAAGTGGT AAAAGAAC 540

Db 421

CATTTTTACAAAAGACCCCTCAAGATAATACTCATCTTACAGAAGAAGAGGT AAAAGAAT 480

Qy 541

CCTCATCAGTCGAATCCTCAAATTCATCAATGGATACTGCCCAACAACCATCT CATACAA 600

Db 481

CCTCATCAGTCGAATCCTCAAATTCATCAATTGATACTGCCCAACAACCATCT CACACAA 540

Qy 601

CAATAAATAGTGAAGCATCTATTCAAACAAGTGATAATGAAGAAAATTCCCG CGTATCAG 660

Db 541

CAATAAATAGAGAAGAATCTGTTCAAACAAGTGATAATGTAGAAGATTCACA CGTATCAG 600

Qy 661

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ATTTTGCTAACTCTAAAATAAAAGAGAGTAACACTGAATCTGGTAAAGAAGA GAATACTA 660

Qy . 721

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Db 661

TAGAGCAACCTAATAAAGTAAAAGAAGATTCAACAACAAGTCAGCCGTCTGG CTATACAA 720

Qy 781

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Db 721

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Oy 841

AAAATAAGGTTAGACCGTTATCTACAACATCTGCCCAACCATCGAGTAAGCG TGTAACCG 900

Db 781

AAAATAAGGCTAGACCATTATCTACAACATCTGCCCAACCATCGATTAAACG TGTAACCG 840

Qy 901

Db 841

Qy 961

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Db 901

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Qy 1081

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Db 1321

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Db 1381

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Qy 1501

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Db 1441

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Qy 1561

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Db 1501

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Qy 1621

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Db 1561

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Db 1621

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Qy 1741

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Db 1681

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Qy 1801

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Db 1741

ATACTGGTGAGTTTAGAACAGCATCCTATGATAATACAATTGCTTTCTCTACA AGTTCAG 1800

Qy 1861

GTCAAGGACAAGGTGACTTGCCTCCTGAAAAAACTTATAAAATCGGAGATTA CGTATGGG 1920

Db 1801

GTCAAGGACAAGGTGACTTGCCTCCTGAAAAAACTTATAAAATCGGAGATTA CGTATGGG 1860

Oy 1921

AAGATGTAGATAAAGATGGTATTCAAAATACAAATGATAATGAAAAACCGCT TAGTAATG 1980

Db 1861

AAGATGTAGATAAAGATGGTATTCAAAATACAAATGATAATGAAAAACCGCT TAGTAATG 1920

Qy 1981

Qy 2041

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Db 1981

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Qy 2101

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Db 2041

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Qy 2161

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Db 2101

GTAATTCTGTATGGGTAACTATTAATGGACAAGACGATATGACGATTGATAG TGGATTTT 2160

Qy 2221

ATCAAACACCTAAATATAGCTTAGGGAACTATGTATGGTATGACACTAATAA AGATGGTA 2280

Db 2161

ATCAAACACCTAAATACAGCTTAGGGAACTATGTATGGTAŢGACACTAATAA AGATGGTA 2220

Qy 2281

TTCAAGGTGATGAAAAAGGAATCTCTGGAGTAAAAGTGACGTTAAAAGA TGAAAACG 2340

Db 2221

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Qy 2401

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Db 2341

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Qy 2461

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Db 2401

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Qy 2581

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Db 2521 ACTCAGA-----

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Qy 2641

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Db 2572

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Db 2632

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